

## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims**

1. (Withdrawn)
2. (Withdrawn)
3. (Withdrawn)
4. (Withdrawn)
5. (Withdrawn)
6. (Withdrawn)
7. (Withdrawn)
8. (Withdrawn)
9. (Withdrawn)
10. (Withdrawn)
11. (Withdrawn)
12. (Withdrawn)
13. (Previously Presented) A method of showing a relationship between at least two views of a three dimensional model, the method comprising:
  - processing three-dimensional model data to generate a two-dimensional drawing of the model, the drawing comprising a first and a second view of the model;
  - receiving user input to position a pointer at a location in three-dimensional space;
  - displaying the two-dimensional drawing, said displaying including:

displaying the pointer in the first view at a relative location in the first view's two-dimensional space that corresponds to the location of the pointer in three-dimensional space; and

displaying the pointer in the second view at a relative location in the second view's two-dimensional space that corresponds to the location of the pointer in three-dimensional space.

14. (Original) A method, according to claim 13, wherein the relative locations are determined by applying a transform matrix for each of the views to the absolute location of the pointer.

15. (Previously Presented) A method, according to claim 13, further comprising:

in response to a user moving the pointer in the first one of the views, moving the pointer a corresponding amount in the second one of the views.

16. (Canceled)

17. (Currently Amended) A method, according to claim 15, wherein the first view comprises a first two-dimensional coordinate space representing a projection of the model, and the method further comprising:

receiving input from a user to move the pointer in the first two-dimensional coordinate space; and

determining a new location of the pointer in three-dimensional space by applying an inverse of a transform matrix mapping the model to the first view to determine ~~a~~ the new location of the pointer based on the received input moving the pointer in the first two-dimensional coordinate space.

18. (Currently Amended) A method, according to claim 17, wherein a new location for the pointer in the second view is determined by applying the transform matrix for the second view to the new location of the pointer in three-dimensional space.

19. (Currently Amended) A method implemented in a computer aided design system of displaying a three dimensional model having a plurality of two dimensional views associated

therewith, each view comprising a representation of the model from a predetermined viewpoint comprising:

rotating the model to present a first one of the views, said views comprising views generated based on the three dimensional model;

pausing to show the first one of the views; and

continuously rotating and pausing the model to present other ones of the views.

20. (Original) A method, according to claim 19, further comprising:

in response to a user indicating that rotation should stop, suspending rotation until the user indicates otherwise.

21. (Original) A method, according to claim 20, further comprising:

after the user has indicated that rotation should stop at a first particular one of the views, indicating a correlation between a first geometry of the first particular one of the views and a second particular one of the views.

22. (Original) A method, according to claim 21, wherein indicating includes highlighting the second particular one of the views.

23. (Original) A method, according to claim 21, wherein, in response to the second particular one of the views not being visible on a user screen, displaying the second particular one of the views on the user screen.

24. (Original) A method, according to claim 21, wherein the first geometry includes at least one of:  
a section line and a detail circle.

25. (Original) A method, according to claim 21, further comprising:

after indicating a correlation between a first geometry of the first particular one of the views and a second particular one of the views, rotating the model to present the second particular one of

the views.

26. (Original) A method, according to claim 19, further comprising:

in response to a presented view being a section view, removing a portion of the model to show the view.

27. (Currently Amended) A computer-based system, for providing interpretation of an electronic drawing, having a plurality of views, comprising:

a virtual folding process for permitting a viewer to view selected views in proximity to each other from a the plurality of possible views;

a hyperlink process for simultaneously highlighting at least one ~~the~~ of a plurality of coordinates of a viewed object as the coordinates appears in more than one view;

a pointer for simultaneously pointing to the same point of a viewed object as the point appears in more than one view; and

a drawing animator for rotating ~~the~~ a three-dimensional depiction of the viewed object about an axis of rotation and highlighting a two-dimensional view when the view is coincident with ~~the~~ a plane of the electronic drawing.

28. (Previously Presented) A computer-based system, according to claim 27, wherein two-dimensional data for the electronic drawing and a program for displaying the electronic drawing are stored in a single file.

29. (Original) A computer-based system, according to claim 28, further comprising storing three-dimensional data in the single file.

30. (Original) A method, according to claim 13, wherein:

the first view comprises a first plurality of two-dimensional objects,

the second view comprises a second plurality of two-dimensional objects, and

for each of said first plurality of two-dimensional objects there is a corresponding one of the second plurality of two-dimensional objects such that corresponding ones of the two-dimensional objects represent a same feature of the three dimensional model.

31. (Original) A method according to claim 30 wherein, in response to a change in a first one of the views when the second one of the views is not visible on a user screen, automatically displaying the second one of the views on the user screen.

32. (Original) The method of claim 19 wherein data for the display of each two-dimensional view and a program for displaying the views are stored in a single file.

33. (Original) The method of claim 32 further comprising storing three-dimensional model data in the single file.

34. (Original) The method of claim 13 wherein the data for the display of the two-dimensional drawing and a program for displaying the two-dimensional drawing are stored in a single file.

35. (Original) The method of claim 34 further comprising storing three-dimensional data in the single file.

36. (Original) A method of showing a relationship between at least two views of a model, the method comprising:

processing model data comprising data detailing a model and data defining a plurality of drawing views of the model, each drawing view comprising a plurality of two-dimensional objects determined from the data detailing the model;

displaying a first one of the drawing views on an output device;

receiving input from a user selecting a first object from the first drawing view;

selecting a second one of the drawing views based on a correspondence between the selected first object and the second view, said correspondence being determined based on the model data; and

automatically displaying the second view to the user.

37. (Original) The method of claim 36 wherein displaying the second view comprises displaying the first and second view simultaneously.

38. (Original) The method of claim 36 wherein:

the selected first object comprises a detail circle representing an area of the first view for which there is a corresponding detailed view, and selecting the second view comprises selecting said corresponding detailed view.

39. (Original) The method of claim 36 wherein the model is a three-dimensional model.

40. (Original) The method of claim 39 wherein:

the selected first object comprises a section line representing a position of a corresponding sectional view of the three-dimensional model, and selecting the second view comprises selecting said corresponding sectional view.

41. (Original) The method of claim 39 wherein:

the selected first object is derived from data modeling a first part of the three dimensional model; the second view comprises a second object derived from the first part of the three dimensional model

selecting a second one of the drawing views based on a correspondence between the selected first object and the second view comprises selecting based on the first object and the second object being derived from a the same part, which is the first part of the three dimensional model.

42. (Original) A method, according to claim 39, wherein:

the first view comprises a first plurality of two-dimensional objects,

the second view comprises a second plurality of two-dimensional objects, and

for each of said first plurality of two-dimensional objects there is a corresponding one of the second plurality of two-dimensional objects such that corresponding ones of the two-dimensional objects represent a same feature of the three dimensional model.

43. (Cancel)

44. (Cancel)

45. (New) A data storage apparatus storing instructions for causing a computer system to show a relationship between at least two views of a three dimensional model, the instructions comprising instructions to cause the computer system to:

process three-dimensional model data to generate a two-dimensional drawing of the model, the drawing comprising a first and a second view of the model;  
receive user input to position a pointer at a location in three-dimensional space;  
display the two-dimensional drawing, said instructions to display comprising instructions to:

display the pointer in the first view at a relative location in the first view's two-dimensional space that corresponds to the location of the pointer in three-dimensional space; and  
display the pointer in the second view at a relative location in the second view's two-dimensional space that corresponds to the location of the pointer in three-dimensional space.

46. (New) The data storage apparatus of claim 45 wherein the instructions further comprise instructions to move the pointer a corresponding amount in the second one of the views in response to a user moving the pointer in the first one of the views.

47. (New) The data storage apparatus of claim 46 wherein the first view comprises a first two-dimensional coordinate space representing a projection of the model, and the instructions further comprise instructions to:

receive input from a user to move the pointer in the first two-dimensional coordinate space; and

determine a new location of the pointer in three-dimensional space by applying an inverse of a transform matrix mapping the model to the first view to determine a new location of the pointer based on the received input moving the pointer in the first two-dimensional coordinate space.

48. (New) The data storage apparatus of claim 45 wherein:

- the first view comprises a first plurality of two-dimensional objects,
- the second view comprises a second plurality of two-dimensional objects, and
- for each of said first plurality of two-dimensional objects there is a corresponding one of the second plurality of two-dimensional objects such that corresponding ones of the two-dimensional objects represent a same feature of the three dimensional model.

49. (New) The data storage apparatus of claim 45 wherein the data for the display of the two-dimensional drawing and instructions for displaying the two-dimensional drawing are stored in a single file.

50. (New) A data storage apparatus storing instructions for causing a computer to display a three dimensional model having a plurality of two dimensional views associated therewith, each view comprising a representation of the model from a predetermined viewpoint, said instructions further comprising instructions to:

- rotate the model to present a first one of the views, said views comprising views generated based on the three dimensional model;
- pause to show the first one of the views; and
- continuously rotate and pause the model to present other ones of the views.

51. (New) The data storage apparatus of claim 50 further comprising instructions to:

- suspend rotation in response to user input indicating that rotation should stop until the receipt of additional user input that indicates otherwise.



52. (New) The data storage apparatus of claim 50 further comprising instructions that, in response to a presented view being a section view, remove a portion of the model to show the view.

53. (New) The data storage apparatus of claim 50 wherein data for the display of each two-dimensional view and a program for displaying the views are stored in a single file.

54. (New) The data storage apparatus of claim 53 further comprising instructions to store three-dimensional data in the single file.

55. (New) A data storage apparatus comprising instructions for causing a computer system to show a relationship between at least two views of a model, said instructions comprising instructions to:

process model data comprising data detailing a model and data defining a plurality of drawing views of the model, each drawing view comprising a plurality of two-dimensional objects determined from the data detailing the model;

display a first one of the drawing views on an output device;

receive input from a user selecting a first object from the first drawing view;

select a second one of the drawing views based on a correspondence between the selected first object and the second view, said correspondence being determined based on the model data; and

automatically display the second view to the user.

56. (New) The apparatus of claim 55 wherein the instructions to display the second view comprise instructions to display the first and second view simultaneously.

57. (New) The apparatus of claim 55 wherein:

the selected first object comprises a detail circle representing an area of the first view for which there is a corresponding detailed view, and the instructions to select the second view comprise instructions to select said corresponding detailed view.

58. (New) The apparatus of claim 55 wherein the model is a three-dimensional model.

59. (New) The apparatus of claim 58 wherein:

the selected first object comprises a section line representing a position of a corresponding sectional view of the three-dimensional model, and the instructions to select the second view comprise instructions to select said corresponding sectional view.

60. (New) The apparatus of claim 58 further comprising instructions to:

derive the selected first object from data modeling a first part of the three dimensional model;

derive a second object from the first part of the three dimensional model wherein the second view comprises said second object;

selecting the second one of the drawing views based on the correspondence between the selected first object and the second view comprises selecting based on the first object and the second object being derived from a same part, which is the first part of the three dimensional model.

61. (New) The apparatus of claim 58 wherein:

the first view comprises a first plurality of two-dimensional objects,

the second view comprises a second plurality of two-dimensional objects, and

for each of said first plurality of two-dimensional objects there is a corresponding one of the second plurality of two-dimensional objects such that corresponding ones of the two-dimensional objects represent a same feature of the three dimensional model.